

FLAP BARRIER & SWING GATE

USER MANUAL

1 PRODUCT INTRODUCTION

1.1 INTRODUCTION

The flap/swing barrier and speed gate are a kind of 2-way speed access control equipment designed for places with high class security requirements.

1.2 FUNCTION FEATURES

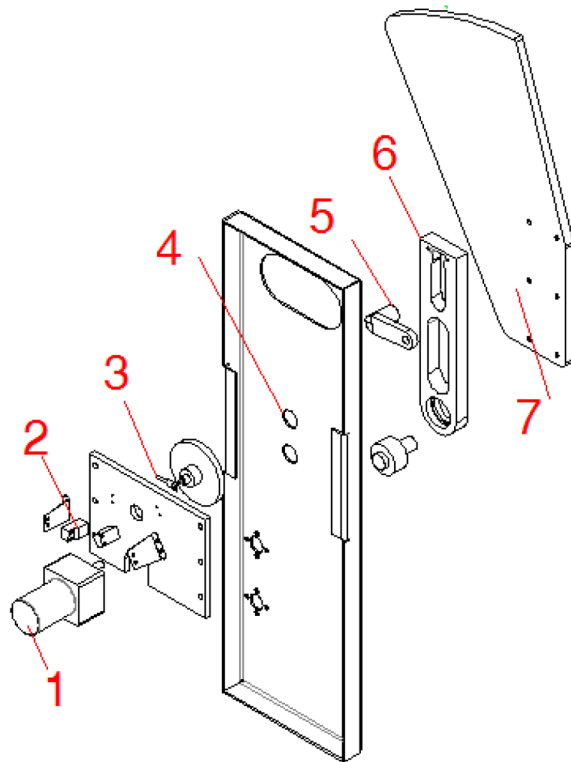
- 1) Varied pass mode can be chosen flexibly
- 2) Standard signal input port: can be connected with most of the access control devices
- 3) The turnstile has automatic reset function: if people swipe the authorized card, but don't pass through within the settled time, they need to swipe card again for entry
- 4) Card-reading recording function: single-directional or bi-directional access can be set
- 5) Automatic opening after emergency fire signal input
- 6) Pinch protection
- 7) Anti-tailgating control technology
- 8) Automatic detection, diagnosis and alarm and sound and light alarm
- 9) High light LED indicator, displaying passing status
- 10) Self diagnostic and alarm function for convenient maintenance and use
- 11) Gate will automatically open when power failure (with 12V battery connected)

1.3 PRODUCT STRUCTURE AND PRINCIPLE

1.3.1 Product structure

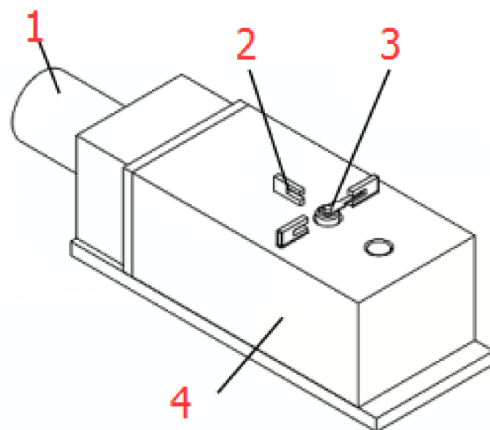
The structure of the product is mainly composed of mechanical system and electric control system

Mechanical system



- 1) Motor
- 2) Position sensor
- 3) Induction plate
- 4) Bearing
- 5) Transmission shaft
- 6) Swing arm
- 7) Barrier

FLAP CORE



- 1) Motor
- 2) Position sensor
- 3) Induction plate
- 4) Core

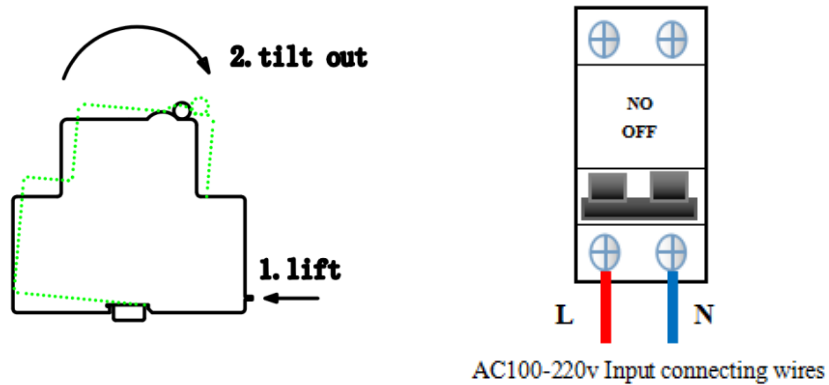
SWING CORE

Electric control system

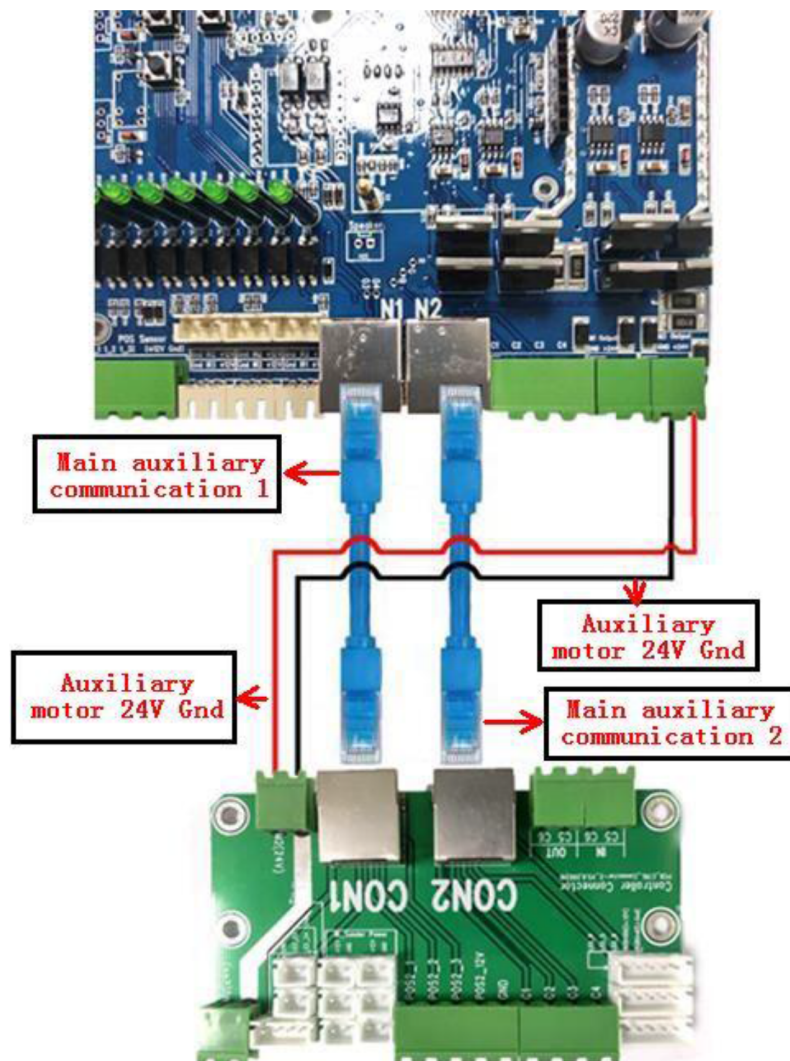
N°	Name	Function
1	Access control device	IC/ID card access control, fingerprint, face recognition, code reader, access control device send delay signal to the turnstile board door signal (it is available according to actual use)
2	Control board	The control center of the system: when receiving the access control device delay signal, it control motor running so that the gate opened. The direction indicator light turns green. While receiving core position sensor, infrared sensor, and judging and processing logic of these signals, keep the gate components of intelligent coordination work
3	Infrared sensor	Detect the passage of people in the lane
4	Position sensor	Detects and controls the opening and closing position of the gate
5	Indicator	Display the current channel status
6	Motor	Drive the barrier moving
7	12V battery	The gate will keep open the door automatically when power failure
8	Power supply	Power supply to control board

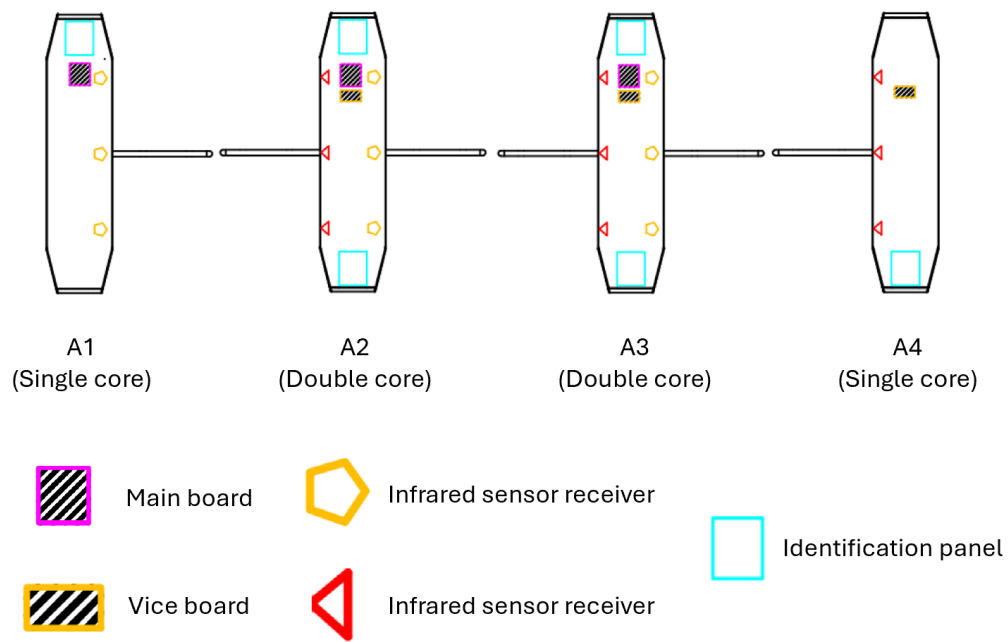
2 EQUIPMENT INSTALLATION

Connecting AC 100~220 V power input

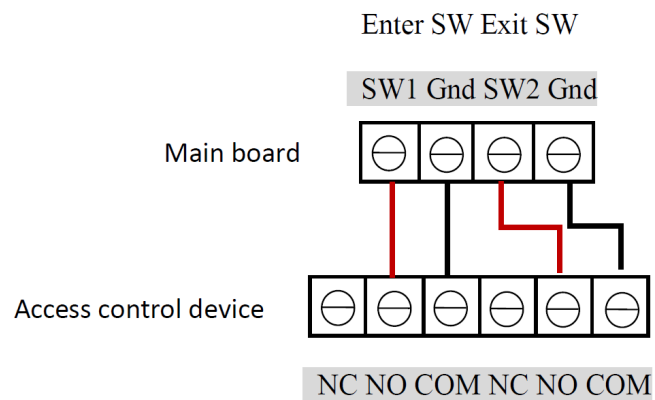


Connection between main machine and vice machine

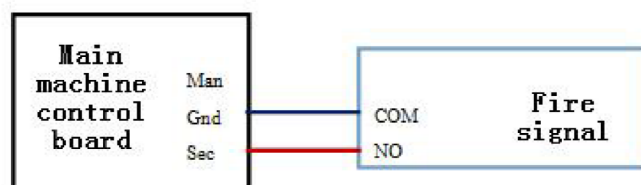




Access control device connection

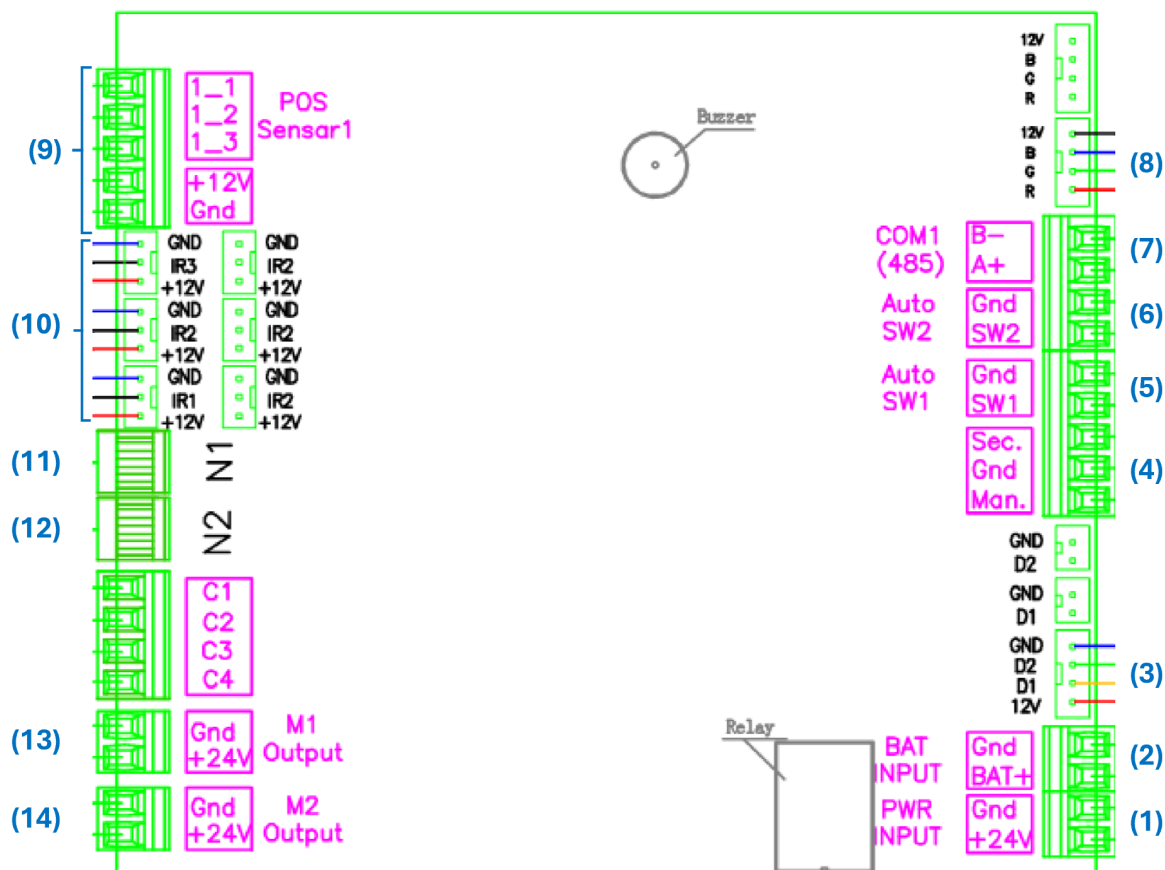


Fire signal connection



3 MAIN BOARD CONNECTION

3.1 BOARD INSTRUCTION



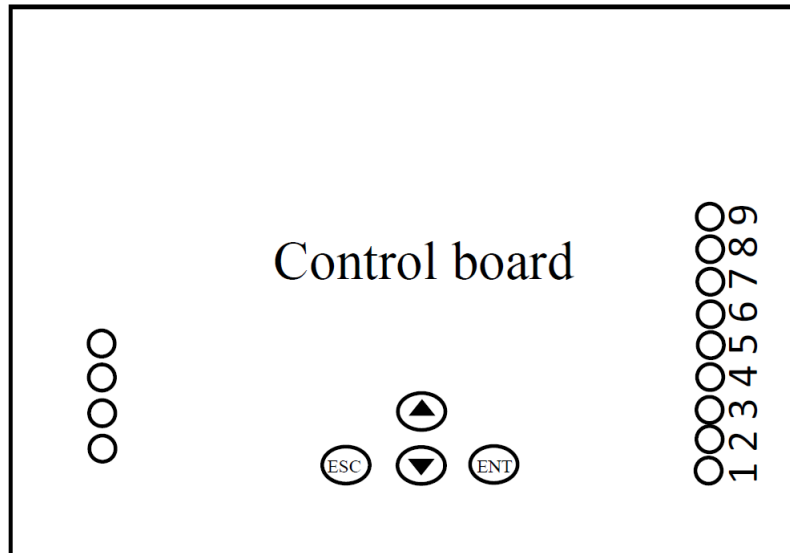
Port	Instruction			Mark
(1) PWR INPUT	1	+24V	24VDC power supply	Connect to 24V DC power supply
	2	GND		
(2) BAT INPUT	3	BAT+	12V battery input port	Connect the 12V battery
	4	GND		
(3) Entry indicator 1	5	+12V	Output for indicator of master machine D1 for enter direction D2 for exit direction	Connect to indicator of master machine
	6	GND		
	7	D1		
	8	D2		
(4) Man Gnd Sec	9	Man	Normally open input Fire alarm input	Short for normally open. Close immediately when cancel
	10	Gnd		
	11	Sec		
(5) Auto SW1	12	SW1	Enter open signal input	Connect to access device: NO-SW1/COM-Gnd
	13	Gnd		
(6) Auto SW2	14	SW2	Exit open signal input	Connect to access device: NO-SW2/COM-Gnd
	15	Gnd		

(7) COM1(485)	16	A+	RS485 communication	Protocol docking
	17	B+		
(8) RGB LED	18	R	Negative of LED red	Connect to LED bar
	19	G	Negative of LED green	
	20	B	Negative of LED blue	
	21	+12V	+12V for LED bar	
(9) POS sensor	22	1-1	Left sensor	Connect to position sensor of core in the master machine. Only use two sensor (open and close)
	23	1-2	Close sensor	
	24	1-3	Right sensor	
	25	+12V	12V output for sensor	
	26	GND		
(10) IR sensor	27	IR1	Enter infrared sensor	Control board alarm when sensor be block
	28	IR2	Pinch infrared sensor	
	29	IR3	Exit infrared sensor	
	30	+12V	12V output for infrared	
	31	GND		
(11) N1	32		Communication between master and vice machine	
(12) N2	33			
(13) M1 output	34	GND	Motor output for master machine	Connect to motor of master machine
	35	+24V		
(14) M2 output	36	GND	Motor output for vice machie	Connect to motor of vice machine
	37	+24V		

3.2 PARAMETER INSTRUCTION

The display screen is refers to the main control board of 3 LED display from left to right. Four buttons: UP and DOWN for switch, ENT for sub-menu and ESC for previous menu. Long press "ENT" 3 seconds unlock into the menu. Select Advanced Parameters and long press "ENT + DOWN" 3 seconds unlock into the menu.





Item	Explanation
1.Parameters	
1.1 Counter	Display pass through count
1.2 Gate mode	Set gate mode (NO, NC and card, free or reject) of enter and exit: 1.NC both reject / 2.NC both free / 3.NC both card (default) 4.NC card/free / 5.NC card/reject / 6.NC free/card 7.NC free/reject / 8.NC reject/free / 9.NC reject/card 10.NO both free / 11.NO both card 12.NO card/free / 13.NO free/card
1.3 Pass timeout	Set maximum waiting time: 10-255, unit 0.1 seconds (default 5 seconds)
1.4 Memory	Set scan card with memory mode: 0.Two-way disable (default) / 1.Enter allow / 2.Exit allow / 3.Two-way allow
1.5 Read In lane	Set scan card after entry lane: 4!GlVdeh +ghidXOW, 2 5!Doo r z
1.6 Open delay	Set authorized open door delay: 0-255, unit 0.1 s (default 0 s)
1.7 Forvh ghodl	Set close door delay after passage finish: 0-255, unit 0.1 s (default 0 s)
1.8 Motor1 vshhg	Set master motor basic speed: 1-100
1.9 Motor2 vshhg	Set vice motor basic speed: 1-100
1.10 Pass hnd	Set IR check passage end position: 1.Exit (default) 2 5!Vafety
1.11 Intrude	Set intrude alarm mode: 1.No alarm / 2.Alarm (default) / 3.Alarm and close
1.12 Reverse	Set passage from reverse alarm mode: 1.No alarm / 2.Alarm / 3.Alarm and close (default)
1.13 Tail-gating	Set tail-gating alarm mode: 1.No alarm / 2.Alarm / 3.Alarm and close (default)
1.14 Advanced Parameters	

14 HQbRbVSG14	Vhw p r wru 4 vshhg z khq r shq g r ru i ru hqwu
15 HQbFbVSG14	Vhw p r wru 5 vshhg z khq r shq g r ru i ru hqwu
16 H[bRbVSG14	Vhw p r wru 4 vshhg z khq forvh g r ru i ru hqwu
17 H[bFbVSG14	Vhw p r wru 5 vshhg z khq forvh g r ru i ru uqwu
18 HQbRbVSG15	Vhw p r wru 4 vshhg z khq r shq g r ru i ru h{lw
19 HQbFbVSG15	Vhw p r wru 5 vshhg z khq r shq g r ru i ru h{lw
1: H[bRbVSG15	Vhw p r wru 4 vshhg z khq forvh g r ru i ru h{lw
1; H[bFbVSG15	Vhw p r wru 5 vshhg z khq forvh g r ru i ru h{lw
1< Vdyh idfwru	Vdyh wkh fxuuhqw sdud phwhu wr idfwru ghidxow
143 Uhod p r gh	Vhw dgg uhod xvhu i ru sdvvhg frxqwhu= 4!Glvdesh +ghidxow, 2 5!Hqwhu d00 r z 2 6!H{lw d00 r z 2 7!Erwk ed00 r z
144 Dxwr rhsruw	Vhw dxwr pdwlf uhsruw jdwh vwdwxv z khq r q fkdqjh: 1.Dlvdeh +ghidxow, / 5.A00 r z
145 QR dlufwlrq	Vhw wkh qrupd00 rshq wkh jdwh rshqlqj glufwlrq (ghidxow hqwhu)
146 Sr zhu lrvw	Vhw wkh qrupd00 rshq wkh jdwh rshqlqj glufwlrq z khq pr zhu idloxuh (ghidxow hqwhu)
147 Eduulhuv	Sljqd0 ru grxeoh pdfklqh z run: 4.Drxesh +ghidxow, / 2.Signal
148 LU sshhg	Vhw LU shqvru shqvlwlylw : 40433 +ghidxow 433,
148 LU t sh	Vhw lqiuduhg vhqvru w sh: 4.SQS +ghidxow, / 5.QSQ
149 LU l r j l f	Vhw uvh l r fd0 LU shqvru l r j l f
14: P r wru protection	Vhw wkh p r wru ryhu fxuuhqw surwhfwlrq wkuhvkrog (ghidxow 5!8D)
14; Vhoi ckhn	Vhw xvhu vhoi fkhfn z khq sr zhu r q (glvdesh e ghidxow)
14< OHG m r gh	Vhw OHG lqglfdwru ghidxow sdud phwhu: 4.Vwdwlf OHG / 5.Vtxduh OHG
153 Vhw dhyice t sh	Vhw crqwu r00hu dhylfh t sh: 4.Wulsrg / 5.l0ds jdwh / 6.Vz lqj jdwh
5!V vhw p Vhw	
5!4 Odqj x d j h	Vhw mhqx dlvs0d ldqj x d j h
5!5 Ghylfh t sh	Glvs0d crqwu r00hu dhylfh t sh
5!6 Yhuvlrq	Glvs0d kdugzduh dqg ilu p zduh yhuvlrq lqirupdwlrq
5!7 Vhw agguhv	Vhw dhylfh l r j l f agguhv
5!8 UV7;8 bdxg	Vhw wkh edxg udwh ri wkh UV7;8
5!9 Uhwvhw	Uhwvhw d00 vhwvlqj wr idfwru ghidxow
51: Uhwvduw	Uhwvduw frqwu r00hu
6!ldfwru Vhw	
6!4 F foh thvw	Rshq dqg forvh g r ru f foh whvw
6!5 lqswx ckhn	Fkhfn lqswx lqwhuidfh vwdwxv
6!6 Rxwsxw thvw	Rxwsxw lqwhuidfh whvw

4 TROUBLE SHOOTING

FAULT 1: gate automatically open when people in to first sensor

Change pass mode two way free to two way card in the menu.

FAULT 2: swipe into the first sensor, gate give alarm and close immediately

This means that the signal connection is opposite, exchange the open signal connect terminal of SW1/Gnd to SW2/Gnd.

FAULT 3: indicator light is not bright

Take the other indicator or control board from other lane and check it.

FAULT 4: there is an indicator that shows the wrong direction

Exchange the connect wire of indicator D1 to D2.

FAULT 5: one side of the wing door does not work

- 1) Check whether the connection wires is loose.
- 2) Turn off the power and use the polimeter to check whether the connection between the master machine and the vice machine is continuous.
- 3) Measure whether M1 or M2 has voltage output when restarting the power supply.
- 4) Check fuse in the board.

FAULT 6: open and close obvious non synchronization

- 1) Check whether the POS sensor connect wires are loose.
- 2) Turn off the power and use the polimeter to check whether the connection between the master machine and the vice machine is continuous.

FAULT 7: Motor idling

- 1) Check whether the POS sensor connect wires are loose.
- 2) Turn off the power and use the polimeter to check whether the connection between the master machine and the vice machine is continuous.
- 3) Check the vice board 12V/GND for voltage output.

FAULT 8: there is one side of barrier is not closed

- 1) Check whether the POS sensor connect wires are loose.
- 2) Turn off the power and use the polimeter to check whether the connection between the master machine and the vice machine is continuous.
- 3) Check the vice board 12V/GND for voltage output.

FAULT 9: swing the side of the pendulum rod can only open 90 degrees or open the side of the pendulum rod hit the box

- 1) Check the abnormal barrier and the normal one whether there is any difference between the fixed angles and whether the pendulum rod is struck or not.
- 2) Check the iron sheet of core whether is loose. If loose, readjust it.

FAULT 10: the swing gate move slowly or shake or give big noisy

Check core

Main machine



Main machine

